



MERCEDES-BENZ

Service

Maintenance Manual USA

Model Year 1972–1980

Passenger Cars Volume 1

Printed in Germany

Reproduction or translation,
in whole or in part, not permitted
without written authorization.

KD 00 113 2601 63 – (483) 1288 2.0

This Maintenance Manual contains maintenance jobs to be performed on Passenger Cars starting model year 1972 up to model year 1980.

Besides the detailed descriptions (both written and illustrated) of these jobs, all necessary checking and adjustment data as well as filling quantities, fuels, lubricants, and coolants, and information on required special tools and specified tightening torques are included.

Each individual maintenance job is assigned a number (position number) which may be found in the outer upper corner of the respective page, arranged in numerical sequence. The position number in the Maintenance Manual corresponds to the number in the Work Sheets and Maintenance Booklet so that, if necessary, when carrying out the maintenance jobs the corresponding texts and data can be immediately found.

The types or engines to which the work applies are listed below the position number. Information on the maintenance intervals during which the individual jobs should be carried out can be obtained from the tables at the beginning of the manual.

A listing of all maintenance jobs is supplied in the index which is arranged in sequence of the unit groups and respective subjects.

Daimler-Benz Aktiengesellschaft
Zentralkundendienst

January 1981

Model designation

	Sales Designation	Model	Engine Type Designation
Sedans	220 D	115.110	615.912
	240 D	115.117	616.916
	240 D	123.123	616.912
	300 D	115.114	617.910
	300 D	123.130	617.912
	300 TD	123.190	617.912
	300 SD	116.120	617.950
	220	115.010	115.920
	230	115.017	115.951
	230	123.023	115.954
	250	114.011	130.923
	280	114.060	110.921
	280 E	123.033	110.984 ¹⁾
	280 S	108.016	130.920
	280 S	116.020	110.922
	280 SE	108.018	130.980
	280 SE	116.024	110.985 ¹⁾
	280 SEL	108.019	130.980
	280 SE 4.5	108.067	117.984
	280 SEL 4.5	108.068	117.984
	300 SEL	109.016	130.981
	300 SEL 3.5	109.056	116.981
	300 SEL 4.5	109.057	117.981
	300 SEL 6.3	109.018	100.981
	450 SE	116.032	117.983/986 ¹⁾
	450 SEL	116.033	117.983/986 ¹⁾
	6.9	116.036	100.985 ¹⁾
	600	100.012	100.980
	600 long 4 doors	100.014	100.980
	600 long 6 doors	100.016	100.980
Coupés	250 C	114.023	130.923
	280 C	114.073	110.921
	280 CE	123.053	110.984
	280 SE	111.024	130.980
	280 SE 3.5	111.026	116.980
	300 CD	123.150	617.912
	450 SLC	107.024	117.982/985 ¹⁾
Convertibles	280 SE	111.025	130.980
	280 SE 3.5	111.027	116.980
Roadster	280 SL	113.044	130.983
	450 SL	107.044	117.982/985 ¹⁾

¹⁾ Engines with CIS (continuous injection system)

	Job No.
Engine, mechanical (00–20)	
Compression pressure, check	751
Cooling water level, check and correct	990
Cylinder head bolt, retighten	752
Engines 100.980/981	page 752.1
114 130	752.3
Engine oil change with filter care	151
Engines 100.980/981	page 151.05
100.985	151.10
110	151.15
114 130 180	151.20
115	151.25
116 117	151.30
615 616 617 up to model year 1976	151.35
616 617 starting model year 1977	151.41
617.950 starting model year 1978	151.45
Heating and venting system, check sealing	038
Hose clamps, check for tight fit	907
Renewing coolant with anti-freeze	991
Supplementary oil filter for hydraulic fan coupling, clean	156
Valve clearance, adjust	753
Engines 100 116 117	page 753.1
110	753.3
115 130	753.5
615 616 617	753.7
V-belts, check condition and tension	757
V-belts, retension	756
Engines 100.980	page 756.05
100.981	756.10
100.985	756.16
110 model year 1973–1976	756.21
starting model year 1977	756.23
114 130	756.29
115 model year 1972–1974	756.35
model year 1975–1976	756.36
starting model year 1977	756.37
116 117	756.55
615 616 617 model year 1972–1976	756.70
starting model year 1977	756.71
starting February 1979	756.72
.617.950 starting model year 1978	756.75
V-belts, check condition and retension, all engines, model year 1980	758
Slacken engine stop and tighten screws	759
Slacken engine stop	760

Note: The figures in () next to the titles are group numbers



Contents

Job No.

Engine, combustion (07/09/47/49)

incl. control linkage, ignition, intake, fuel and exhaust system	
Air filter element, clean	202
Air filter element, replace, model year 1980	203
Air injection, check, model year 1974	765
Begin of delivery, checking, Engines 616 617	787
Carburetor flange, retighten	876
Catalyst, replace	767
Contact breaker points, renew	773
Dwell angle, check	781
Dwell angle and ignition timing, adjust	782
Engine control linkage and control shafts, lubricate	415
Engine control linkage, check	813
Exhaust gas recycling, check, model year 1973/1974	763
Exhaust gas turbo charger, retighten nuts	877
Exhaust system, retighten slip joints	951
Filter of auxiliary air valve, replace	806
Flame guard filament, clean	762
Fuel evaporation system in engine compartment, check, model year 1974	764
Fuel filter, clean/replace	847
Fuel filter element, replace	849
Fuel filter or filter element, replace	840
Fuel lines and hoses of electronically controlled fuel injection system, check for tight fit	891
Fuel main filter, clean/replace	845
Fuel prefilter, check	844
Fuel pump, clean strainer	851
Fuel pump, renew strainer	852
Fuel system, check condition and sealing	041
Heater flaps, clean and spray	785
Idle speed adjustment, check and adjust	797
Idle speed, check and adjust	798
check with CO measuring instrument and adjust	
Engine 100.985 110.984/985 117.985/986	
with CIS (continuous injection system) up to model year 1979;	
(model year 1980 see Job No. 799)	page 798.20
100 130	798.30
110 with Solex carburetor 4 A 1	798.35
115 with Stromberg carburetor	798.40
116 117 with electronically controlled gasoline injection system	798.50
130 with Zenith carburetor	798.55
Engines 615 616 617 up to model year 1979	798.15
Engines 616 617.912 model year 1980	798.16
Engine 617.950 model year 1980	798.17
Idle speed, check and readjust, model year 1980	799
check without CO measuring instrument and adjust	
Engine 110 117 model year 1980	
Idling speed stabilization, check, model year 1972	793
Ignition change-over, check	774
Ignition timing, check and adjust	772
Intake and exhaust manifolds and exhaust flange, check for tight fit	871

	Job No.
Oil-bath air filter, check and adjust oil level	101
Oil-bath air filter, clean	205
Oil level in damper of Stromberg carburetor, check and fill up	788
Oil level in injection pump, check	800
On-off ratio, readjust if necessary	776
Engines 110 117 model year 1980	
Oscillograph picture, evaluate / Check ignition system for condition	832
Oxygen sensor, replace	768
Engines 110 117 model year 1980	
Spark plugs, replace	770
Spark plugs. Check, replace if necessary	771
Engines 110 117 model year 1980	
Throttle valve, clean, model year 1974	766
Throttle valve lift / coasting conditions, check, model year 1972/1973/1974	796
Clutch (25)	
Clutch driven plate, check wear	501
Clutch operation, check condition and sealing	045
Fluid level of clutch operation, check and correct	510
Test drive – clutch operation and gear shift, check functioning	098
Manual transmission (26)	
Oil change – manual transmission	171
Oil level, check and correct	121
Test drive	098
Automatic transmission (27)	
Fluid level, check and correct	120
Oil change, automatic transmission	170
Oil filter for automatic transmission, replace	174
Test drive	098
Suspension (32)	
Air suspension system	
Air bellows, check	676
Air filter, replace	470
Air suspension, check condition	087
Condensation from air reservoir, drain	466
Fixing bolts of air compressor, tighten	902
Fluid level in anti-freeze device, check and top-up	463
Hydro-pneumatic suspension	
Ball joints of connecting rods for level controller, check	629
Fluid level, check and correct	139
Pressure reservoir and central reservoir for gas filling pressure, check	628
Rubber sleeves of ball joints on tube shocks, check	020
System for leaks and condition, check	086



Contents

Job No.

Front axle (33)

Charge of front wheel bearing, renew grease, check tapered roller bearing (only type 116.036)	631
Fixing bolts of bearing pins for lower wishbones, retighten	922
Front axle, grease	250
Hub caps of front wheel bearings, renew grease	388
Joints for condition and leaks of rubber sleeves, check	028
Wheel bearing end play, adjust	630

Rear axle (35)

Detent for rear axle carrier, adjust	650
Front and rear axle, grease	250
Oil level, check, adjust	130
Oil change, rear axle	180

Wheels and wheel adjustment (40)

Spherical collar bolt of wheels, retighten	988
Tires, check, if required interchange wheels	982
Tire pressure, correct	987
Toe-in of front wheels, check	625
Vehicle level on vehicles with air suspension, (position of wishbone arms on front axle and rear wheel camber), check	622
Wheels, remove and refit, disc wheels, check	983

Propeller shaft (41)

Joint discs of propeller shaft, check	030
---	-----

Brakes (42)

Brake cables, check for ease of movement	009
Brake caliper pistons, check sealing and ease of movement and condition of dust caps (refer to job No. 712)	
Brake discs, check and clean, remove brake pads for this purpose	712
Brake discs, check and clean (refer to job No. 712)	
Brake discs, check; brake discs and air ducts, clean (refer to job No. 712)	
Brake fluid, renew	702
Brake pads, remove, clean and check and/or replace (refer to job No. 712)	
Brake system, bleed	701
Brake test on dynamometer/Test drive	097
Front wheel brake/Visual checkup of brake pads	711
Fluid level of brake system, check and correct	700
Oil level in vacuum pump	704
Parking brake, adjust	706
Ventilation bores on compressed air brake booster, clean	713
Brake lines, check for damage	714

Steering system (46)

Bolts and nuts for high pressure oil pump and support of power steering, retighten	920
Fixing screws, retighten	924
Fluid level of mechanical steering, check and correct	135
Fluid level of power steering, check and correct	134
Steering and steering linkage, check play	025

Job. No.

Electrical system (15/54/82)

Functional check; lights, signals, windshield washer unit and windshield wipers	099
Fixing bolts alternator, check	895
Fluid level of battery, check	821
Fluid level of windshield washer unit, check	465

Comfort hydraulic system (80)

Condition and sealing of comfort hydraulic system, check	023
Fluid level of comfort hydraulic system, check	494

Heating, venting, air conditioning (83)

Bolts and nuts of compressor support, retighten	905
Functional check, heating and venting	099
Fluid level of air conditioning, check	484
Perlon filter in fan wheel (front heater box), replace	497
Perlon filter in magnetic valve of heater, replace	498

Body (60—98)

Door hinges, lubricate	350
Door locks, lubricate	393
Door weather seals, clean	492
Engine hood, lubricate	395
Mirror, outside (folding), lubricate	375



Maintenance Chart Model Years 1975–1976

	107.024 107.044		114.060 114.073 116.020			116.032 116.033	
Job. No.	1. Inspection at 200–600 miles 2. Inspection at 6,000 miles Lubrication and brake inspection – every 6,000 miles Maintenance – every 12,500 miles Additionally every 25,000 miles		1. Inspection at 200–600 miles 2. Inspection at 6,000 miles Lubrication and brake inspection – every 6,000 miles Maintenance – every 12,500 miles Additionally every 25,000 miles	1. Inspection at 200–600 miles 2. Inspection at 6,000 miles Lubrication and brake inspection – every 6,000 miles Maintenance – every 12,500 miles Additionally every 25,000 miles	1. Inspection at 200–600 miles 2. Inspection at 6,000 miles Lubrication and brake inspection – every 6,000 miles Maintenance – every 12,500 miles Additionally every 25,000 miles	1. Inspection at 200–600 miles 2. Inspection at 6,000 miles Lubrication and brake inspection – every 6,000 miles Maintenance – every 12,500 miles Additionally every 25,000 miles	1. Inspection at 200–600 miles 2. Inspection at 6,000 miles Lubrication and brake inspection – every 6,000 miles Maintenance – every 12,500 miles Additionally every 25,000 miles
009							
020							
025		●					
028	●						
029	This Job No. is contained in Job No. 025						
030	●	●		●		●	
038	●	●	●	●	●	●	●
041	●	●	●	●	●	●	●
086							
097							
098							
099							
120	●	●	●	●	●	●	●
130							
134	●	●	●	●	●	●	●
139							
151	●	●	●	●	●	●	●
170			●				
174			●				
180	●	●		●	●	●	
202							
350			●				
388			●				
393			●				
395			●				
398	Due to further development of long-term lubricants no longer required						
415		●	●	●	●	●	●
465	●	●	●	●	●	●	●
484	●		●	●	●	●	●
530	Deleted as result of technical progress						
612	Deleted as result of technical progress						
625			●		●		
628							
629	Deleted as result of technical progress						
630		●		●		●	
631							
700	●		●	●	●	●	●
702 ²⁾			●		●		●
703	This Job No. is contained in Job No. 712						
706			●		●		●
707	This Job No. is contained in Job No. 712						
708	This Job No. is contained in Job No. 712						
709	This Job No. is contained in Job No. 712						
711	●	●		●	●	●	
712			●		●		●
714			●		●		●

Maintenance Chart Model Years 1975–1976

Job. No.	107.024	107.044	114.060	114.073	116.020	116.032	116.033
752	●	1. Inspection at 200-600 miles 2. Inspection at 6,000 miles	Lubrication and brake inspection – every 6,000 miles	Maintenance – every 12,500 miles	Additionally every 25,000 miles		
753	● ¹⁾						
756	●	● ¹⁾	●	●	●	● ¹⁾	● ¹⁾
757		●					●
762		●					●
770		●					●
772	●	● ³⁾	●				● ³⁾
773		● ¹⁾					● ¹⁾
781	● ¹⁾					● ¹⁾	
782		● ¹⁾					● ¹⁾
798	●	●	●	●	●	●	●
813			●		●		
821		●	●	●	●	●	●
832			●		●		●
847			●		●		●
871	●		●		●		●
891	● ¹⁾	● ¹⁾				● ¹⁾	● ¹⁾
905	●						
907	●		●	●	●		
924	●		●	●	●		
951	●		●				
982			●				
983			●				
987	●		●				
988			●				
990	●	●	●	●	●	●	●
991 ⁴⁾	●	●	●	●	●	●	●

1) Not applicable starting model year 1976

- 2) This job is to be carried out yearly if possible in spring

3) Only model year 1976

4) This job is only to be carried out every 2 years



Maintenance Chart Model Years 1975–1976

Job. No.	115.017	115.114	115.117
009	1. Inspection at 200–600 miles 2. Inspection at 6,000 miles	Lubrication and brake inspection – every 6,000 miles	
025		Maintenance – every 12,500 miles	
028	● ●		
029		1. Inspection at 200–600 miles 2. Inspection at 3,000 miles	
030	● ●	Lubrication – every 3,000 miles	
038	● ●	Lubrication and brake inspection – every 6,000 miles	
041	● ●	Maintenance – every 12,500 miles	
045		Additionally every 25,000 miles	
097			
098			
099			
101			
120	● ●		
121			
130			
134	● ●		
151	● ●		
170	● ●		
171			
174	● ●		
180	● ●		
202			
205			
350			
388			
393			
395			
398	Due to further development of long-term lubricants no longer required		
415	● ●		
465	● ●		
484	● ●		
501			
530	Deleted as result of technical progress		
612	Deleted as result of technical progress		
625			
630	●		
650			
700	●		
702 ¹⁾	●		
703	This Job No. is contained in Job No. 712		
704 ²⁾	●		
706	●		
707	This Job No. is contained in Job No. 712		
709	This Job No. is contained in Job No. 712		
711	●		
712	●		

Maintenance Chart Model Years 1975–1976

Job. No.	115.017	115.114	115.117	
714	● ●	1. Inspection at 200–600 miles 2. Inspection at 6,000 miles Lubrication and brake inspection – every 6,000 miles Maintenance – every 12,500 miles Additionally every 25,000 miles	● ●	1. Inspection at 200–600 miles 2. Inspection at 3,000 miles Lubrication – every 3,000 miles Lubrication and brake inspection – every 6,000 miles Maintenance – every 12,500 miles Additionally every 25,000 miles
752	● ●			
753	● ●			
756	● ●			
757	● ●			
762	● ●			
76 ³⁾	●			
2	●			
3				
781	●			
782				
785 ⁴⁾				
787 ⁵⁾				
788	● ●	● ●	● ●	
797				
798	●	●	●	
800				
813				
821	●	●	●	
832	●	●	●	
844				
845				
871	●	●	●	
876	●	●	●	
895				
905	●	●	●	
907	●	●	●	
920	●			
924	●			
951	●			
982				
983	●			
987	●			
988	●			
990	●			
991 ⁶⁾	●			

1) This job is to be carried out yearly if possible in spring

2) Not applicable starting model year 1976

3) This job is only to be carried out on type 230 (115.017) with the California exhaust emission control system

4) This job is only to be carried out on type 230 (115.017) with the federal exhaust emission control system

5) This job is only to be carried out at 25,000 miles

6) This job is only to be carried out every 2 years

